



# USPS Advanced-Drive Transport and Delivery Vehicle Demonstration Project

The San Joaquin Valley Air Pollution Control District and project team is overseeing the building and deployment of 15 zero-emission electric United States Postal Service (USPS) step-vans and charging infrastructure across two USPS hubs in Stockton and Fresno in California's Central Valley. The step-vans will form the basis of the USPS Advance Vehicle Cluster from which USPS can continue to explore the electrification of its massive fleet of vehicles. 7 step-vans are being built and provided by Motiv Power Systems and 8 from Cummins Electrified Power. During the project the USPS will operate step-vans on routes of 50 to 75 miles with frequent stops.



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

The project includes driver training, data capture and data analysis. It will also create a roadmap for further commercialization in parcel delivery service by demonstrating the practicality and economic viability of zero-emission units. A 'Voice of the Customer' event will be held to discuss these opportunities with interested fleets. Funding is provided to evaluate opportunities for solar generation and storage to further enhance the benefits of zero-emission trucks.

**Dates:** 07/01/2017 – Spring 2020  
**Grantee:** San Joaquin Valley Air Pollution Control District  
**Partners:** United States Postal Service, CALSTART, Motiv Power Systems, Cummins Electrified Power, Black & Veatch

**Grant Amount:**

CARB Contribution: \$4,555,670  
Matching Funds: \$2,222,903  
Project Total: \$6,778,573



**Vehicles/Equipment Funded**

15 zero-emission all electric USPS delivery step-vans (Class 4):

- 8 Cummins Electrified Power (6 Fresno, 2 Stockton)
- 7 Motiv Power Systems (4 Fresno, 3 Stockton)

15 associated EVSE at two locations:

- Fresno Vehicle Maintenance Facility- 10 chargers: 4 3-Phase 208V/240V @ 100A Level 2; 6 Single Phase 240V @ 80A Level 2
- Stockton USPS West Lane Post Office- 5 chargers: 3 3-Phase 208V/240V @ 100A Level 2; 2 Single Phase 240V @ 80A Level 2

**Lessons Learned**

- Electric vehicle on-road performance on par or better than gasoline.
- Range of vehicles meeting operational needs
- Electrical infrastructure costs and designs are not optimal yet.

**Status Updates**

- Two designs (one of each manufacturer) both completed Acceptance Testing and are currently deployed
- Driver training has been completed
- Infrastructure has been completed



+



EFFICIENT  
DRIVETRAINS®

